Daily Diary Report by Bid Item

Contract No.: 04-0120F4
Diary #: 1156 **Const Calendar Day:** 729 **Date:** 03-Jun-2014 **Tuesday**
Inspector Name: Brignano, Bob **Title:** Transportation Engineer
Inspection Type:
Shift Hours: **Break:** **Over Time:**
Federal ID:
Location:
Reviewer: Schmitt, Alex **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** **12 PM** **4PM**
Precipitation **Condition** overcast am, clear pm

Working Day ☑ If no, explain:

Diary: Dispute ☐

General Comments

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:

ABF Engineer Kelvin Chen is working part time in the field and office on CCO 314.

There is work in the field on setup of TR's 14-17. Crews at the Pier 7 warehouse area are working an 8-hour shift 0600 through 1430. Ironworkers Jared Garrett and Jonathan Canites work all day on CCO 314. Laborer Carlos (Pedro) Garcia works all day on CCO 314. Operator John Sabatino works at the CCO 314 site about a half hour (~0930~1000) – the non-CCO 314 operations elsewhere at the Pier 7 warehouse area at other times in the day not covered by this diary.

At the start of the day, the laborer continues work securing the tent feet to the asphalt at TR 15 (work completed yesterday at TR 14 and started at TR 15). He uses a rotohammer to drill holes in the asphalt under the holes in the tent feet and then adds the wedge expansion anchors. This work is complete ~0900, but he also does other work during some of this time this morning – see below for TR 7 work between ~0730 and ~0800.

The ironworkers start the day continuing to assemble 4 new tent frames for use at TR's 16 & 17 – necessary to reduce thermal effects on the test rigs. Included in this work is drilling holes and attaching the frame sections to each other with left over 1/4" bolts and nuts from the previously assembled tent frames. They also use duct tape to temporarily connect the sections to hold them in place prior to drilling the holes and adding the hardware. The work to drill and bolt the tent frame pieces together is about 1 to 2 hours for this first tent. They are still working on the first tent frame, and they only have enough nuts and bolts for this first tent until the new hardware arrives. ABF's order yesterday of 200 each 1/4" bolts and nuts from Bay Bolt does not arrive today until the end of the shift.

After ~0900, the laborer cuts 4x6's for supporting the TR's 16 & 17 jacks, with this being done ~1200. After ~1000, the ironworkers attach the hydraulic hoses to the jacks in TR's 14 & 15, with this being done ~1030. After ~1030, the ironworkers and laborer start putting tarps on the tent frames at TR's 14 & 15. The top tarps are on the TR 14 tent frames by ~1100, then after the lunch break, rope tiedowns are added to the TR's 14 & 15 tent frames (use rope to tie tent frame to the k-rail) and top tarps are added to the TR 15 tent frames.

In the afternoon, the laborer also works on the timber wire runs for VGO and CT-METS (AE). The short VGO wire run from their trailer to the box with the eDAQ needs to be fixed (replace weak/weathered plywood panels with new plywood). For the CT-METS AE wiring, two an additional protection segments are needed (both about 8' long) for the power and network cable runs from the test rigs towards the

BayView Trailer.

Working from VGO on site today are Rob Rutledge and Mattea. They start work on site at 0800, take lunch between 1200 and 1300, and leave the field about 1600 - then continue work on data checks and programming at the hotel. A check of yesterday's re-soldered connection between the wire run and the tail from a strain gauge at TR 15S appears to have solved the issue discovered over the weekend with the data from this strain gauge. VGO also adds the pressure transducers at TR's 14 & 15. Then, there is a check of the pressure transducers (see below). Portions of the day are also spent working on the spreadsheet for the plots and the calculated channels.

Between ~1130 and ~1150, a quick check to make sure the pressure transducers work correctly and have been wired correctly is performed by ABF's ironworkers and VGO. Note that the strain gauges have not been zeroed so the numbers are not exact, with this intended as a rough check of the pressure transducers. At TR 14, the hydraulic pump is used to increase the pressure to 700 psi (63k per strain gauges) and then 1500 psi (170k per strain gauges). The forces per the strain gauges are lower than anticipated and indicate that Gauge 1A/B (for jacks 1A and 1B used at TR 14) reads high. Options to be decided in the future include using the master dial gauge or increasing the pressure targets at this test rig. Note that the VGO pressure transducers appear to work normally and the force in the rod during the jacking steps will be controlled by the strain gauges. Then, at TR 15, the hydraulic pump is used to increase the pressure to 700 psi (99k per strain gauges) and then 1500 psi (188k per strain gauges). The forces per the strain gauges are about what is anticipated at TR 15.

CT-METS (Scott Croff and Elijah Turner) install AE sensors on TR's 14 & 15 between ~0900 and ~1030. Then they work again on the AE sensors between ~1330 and ~1400.

Related to Test IV, but from a previous phase with TR 7, the labor works between ~0730 and ~0800 to secure the rod, washer, and nut on the pallet for the shipping scheduled to start today with pickup of this pallet. This rod is being sent to a lab for the pull to failure operation. The nut is secured with tie wire in the root of the adjacent rod thread so it cannot rotate off the end of the rod, both ends of the rod that overhang the pallet are protected with rags and burlap that are then wrapped with plastic to hold in place, and the wedges that prevent the rod from rolling on the pallet are screwed to the pallet (note that the rod previously was secured down tight on the pallet with steel banding at the heat treatment facility). UPS freight is scheduled to pick up the pallet between 10am and 2pm when ABF's hourly crews working an 8-hour shift between 6am and 2:30pm can load the pallet on the truck, but the truck arrives late at about 4pm. ABF's receiving staff (Anthony Garcia) loads the pallet on the truck, but then the pallet has to be unloaded because the payment number provided by CT-METS is not a valid code according to UPS Freight. The UPS Freight driver will not take the pallet without this being resolved, and he could not wait for it to be resolved because the truck was already running late. CT-METS then provides a new payment number, but it is too late for a pickup today.

Separate from the TR's 14-17 setup work, ABF cut pieces yesterday from other 2013 rods for Test V. Today at about 0930, ABF puts the 3 pieces on a pallet and secures them (plastic wrap) on the pallet. The freight pickup of this pallet is scheduled for tomorrow. ABF also moves the left over rod pieces (after cutting the samples yesterday) from the welding shop in the warehouse (where the table bandsaw is located for yesterday's cutting) to the storage area of the warehouse. While placing the 2 long rod pieces in the storage area, the ironworkers and operator also move other rods (CCO's 312, 314, and 337) as I direct to better organize the material being stored in this area - some rods stored in an adjacent area of the warehouse are consolidated with similar material, so like material is all together for ease in using/locating in the future. This work is done today because a fencing sub-contractor is scheduled to start work here tomorrow to fence in this area, reducing access for doing this reorganization work.

A compressor – IR 185 ABF ID 002039 – is on idle/standby at the test rig work area. A 7kW generator – Whisperwatt 7000 – ABF ID 002343 is used for most of the day. A 40kW generator – MQ Power 40 – ABF ID 002051 is used briefly and then is on idle/standby at the test rig work area. A Hydraulic Pump for running the jacks is used briefly and then is on idle/standby at the test rig work area. An oxyacetylene torch is on idle/standby at the test rig work area. An extendable forklift (Gradall 544D – ABF ID 002005)

and small forklift (CAT – ABF ID 002004) are used at different times on CCO 314 work. A Kubota Cart is used by the laborer, and a second Kubota Cart is used at times by the ironworkers.

Note that there is k-rail at this work area. Some of the k-rail is rented and addressed by the rental agreement. Some of the k-rail is ABF's k-rail used on site and paid as rented from ABF on a daily basis. To elevate the k-rail, crane mats and timber blocking (12x12's) are in use. The k-rail quantities are as follows:
10' bought k-rail = 20 pieces
20' rented k-rail = 10 pieces
20' ABF k-rail = 6 pieces

The tabulation of the 20' ABF k-rail is as follows:
Two (2) 20' ABF k-rail at the north end of TR 17.
Two (2) 20' ABF k-rail at the north end of TR 16.
One (1) 20' ABF k-rail at TR 15 (longitudinal running).
One (1) 20' ABF k-rail at TR 14 (longitudinal running).

The agreed extra work with ABF is as follows:
Engineer Kelvin Chen - 2 hrs
Laborer Carlos (Pedro) Garcia - 8 hrs
Ironworker Jared Garrett - 8 hrs
Ironworker Jonathan Canites - 8 hrs
Radios (3 radios) - 24 hrs
Extendable Forklift - 1 hrs
Small Forklift - 2 hrs
7kW Generator - 8 hrs
Drill - 4 hrs
Skilsaw - 4 hrs
k-rail: 6 pcs @20'
Crane Mats (12x12 - 5'x16') - 2 pcs
Crane Mats (12x12 - 5'x7') - 8 pcs
See the attached Extra Work Order - Signed with ABF for CCO 314 work

CCO 278S1 AND CCO 96: SPARE SUSPENDER DELIVERY AND STORAGE:

Yesterday, 2 truck loads arrived on site and were unloaded. The third truck load was also originally expected yesterday, but it was delayed and arrives today instead. This third truck arrives mid-morning and is unloaded by ABF (ironworker Obra Paulk and operator John Sabatino using Hoist P360 forklift – ABF ID 002131), with the material placed in Bay 30 in the warehouse next to the material delivered yesterday. This third truck has 1 reel with a spare suspender PP78S with sockets.

INSPECTOR OT REMARK:

Field and Office 2 hours: ABF's shift is 0600 to 1430, VGO is in the field 0800 to 1600, and I am present in the field most of the time between 0600 and 1430. In the 1430 to 1630 time period, I am mostly in the office addressing various CCO 314 issues. I am also in the field and office to address an issue with the scheduled pickup of the TR 7 rod – the pickup at ~1600 is later than scheduled and then the pallet ends up not being taken by UPS Freight because of an issue with the payment number provided by CT-METS. A new payment number is provided by CT-METS this afternoon, but it is too late for a pickup today and will happen tomorrow instead. My shift is 0600 to 1630 and my OT hours are 1430 to 1630.